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(54) NETWORK BROADCASTING SYSTEM

(57)Abstract:

PROBLEM TO BE SOLVED: To visually offer contents of a broadcast program offered through radio voice broadcasting via the Internet, an intra-company LAN, and other networks, and to transmit the program contents to listeners more deeply.
SOLUTION: This system is provided with a program data inputting means 10 for converting program information related with a program on radio broadcasting into text data, image data, animation data, and other digital program data, a data-converting means 20 for converting the digital program data which are transferred from the program data inputting means 10 into HTML data, and a second server V2 for storing and preserving the HTML data converted by the data-converting means 20, so that the HTML data can be read from client terminals C1, C2 and so on.

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CLAIMS

[Claim(s)]
[Claim 1] The network broadcast system by which program information about the program in a radio broadcasting is characterized by to have the program data input means by which a conversion output is carried out at text data, image data, and the digital program data of a video data and others, a data-conversion means to by_which said digital program data with which it is transmitted from this program data input means are changed into HTML data, and the 2nd server from which storage preservation of the HTML data changed with this data-conversion means is carried out in read-out **** from a client terminal.
[Claim 2] In claim 1 publication, it corresponds to the attribute of said HTML data transmitted from said data-conversion means. The predetermined location of the browser of said client terminal is equipped with a configuration setting means by which the display-position identifier which carries out display assignment is added to said HTML data. This configuration setting means is a network broadcast system which generates the file for a display according to the attribute of said HTML data, and is characterized by carrying out storage preservation by using this file for a display as new HTML data at said 2nd server.
[Claim 3] In claim 1 or two publications Said various digital program data relevant to the program of CD jacket, an artist's portrait, the image of a prize prize, and others in read-out **** beforehand as a text file, an image file, and a program file of a voice file and others The digital program data-logging section by which storage preservation is carried out, The network broadcast system characterized by having the link setting means which carries out selection read-out of the desired digital program file from this digital program data-logging section, and carries out linking of the correspondence part of said HTML data to this digital program file by which selection read-out was carried out.

[Claim 4] In claims 1 and 2 or three publications A program The sponsor data-logging section by which storage preservation of the company name image of the sponsor who provides, a trademark LOGO image, and the various sponsor data of URL and others of the Internet homepage is beforehand carried out in a text file, an image file, a voice file, hyper-text data, etc. by read-out ****, The network broadcast system characterized by having the setting time-of-day control means which reads said sponsor data corresponding to the offer sponsor of the program under broadcast from said sponsor data-logging section, and is transmitted to said data-conversion means.
[Claim 5] In claim 3 or four publications said 2nd server Before jumping to the homepage of a sponsor company, the standby time from the time of the click input signal reception to the sponsor display currently displayed on the 4th viewing area on a browser to the next jump is made into the substantial advertising exposure time. The file for a sponsor display which exposes goods to notify only of the time amount etc. intensively is boiled and stored in a visitor's access ****. said file for a sponsor display The network broadcast system characterized by controlling the advertising exposure time by the setting time-of-day monitor means which carries out supervisory control so that only the standby time from the time of the access initiation to a sponsor display to the next jump may be displayed on a visitor's browser.

DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[Field of the Invention] This invention can offer visually the contents of the program currently sponsored by radio voice broadcast in the network of the Internet, and LAN in a company and others, and relates to the network broadcast system which can transmit the contents of a program to a listener more deeply.
[0002]
[Description of the Prior Art] In the conventional radio broadcasting, the contents of the program (carried out) recorded in broadcast studio are broadcast with voice. Since the starting voice broadcast has the main method which modulates a subcarrier by amplitude modulation, frequency modulation, etc., the detector circuit is realizable with an easy configuration. Consequently, in current, many very cheap radio broadcasting accepting stations are offered.
[0003] Although reception can carry out very simple, since the information media in an end is voice, the radio broadcasting with this voice also has much failure in hearing of a listener. In this case, unless the starting program which was missed was being

recorded, it was very difficult to get to know the contents of the missed program concerned again.

[0004] On the other hand, the so-called Internet radio broadcasting service in which a part of conventional voice radio broadcasting is transmitted to the public by the Internet screen oversize as voice data is offered by development of the latest Internet network.

[0005] In this Internet broadcast service, although limited to the program which the right relation between copyright and others in an adjustment became among the programs of an actual radio broadcasting, when an operator accesses the server which accumulated the voice data file concerning a desired program from a client terminal, the voice data file concerning a program is read from the server. And the program of a radio broadcasting can be heard at an operator's client terminal by performing the voice file playback program currently offered from each vendor.

[0006] However, it is almost the case that the program sponsored with such Internet radio broadcasting service is usually a program broadcast by the radio broadcasting in the past. It is because it is necessary to accumulate in an end server as a voice file in order to open the contents of the program to the public. Therefore, about the contents of broadcast of the so-called live program by which the radio broadcasting is carried out when an operator accesses a server, however the operator might be skilled in the network, it was not able to know through it.

[0007] Here, JP,10-126354,A receives the teletext represented by the "radio appearing" (trademark) service which the applicant of this invention offers with an exclusive accepting station, carries out the conversion output of the received alphabetic data at a hypertext, and indicates the broadcast mold real-time hypertext correspondence procedure which offers URL for making it jump to the site of the program concerning a teletext, and its receiving set.

[0008] However, although it is the requisite that, as for this broadcast mold real-time hypertext correspondence procedure and its receiving set, the broadcasting station is carrying out teletext broadcast of the contents of the program under broadcast by the hypertext with current radio, since service which offers another contents interlocked with the contents of the program concerned in teletext broadcast does not have the service which offers the contents of a program concerned itself by teletext broadcast in the hypertext even if there is, it is difficult to realize. Moreover, even if realizable, the interface which connects the accepting station only for teletext broadcasts, and this terminal and the personal computer terminal for decoding becomes indispensable separately, and it is thought that a listener's burden is large.

[0009]

[Problem(s) to be Solved by the Invention] Therefore, this listener (a viewer is included.) It is below the same. The program currently broadcast by the conventional radio broadcasting is distributed to a listener almost real time and effectively, without forcing it a burden in any way. It looked forward to the appearance of the completely

new broadcast system which can make the contents of a program under broadcast also permeate certainly those who can be made to understand the contents of a program more deeply, and are not hearing the contents of the radio broadcasting program (for example, voice broadcast) in a radio broadcasting.
[0010]
[Means for Solving the Problem] Then, a program data input means by which the conversion output of the program information about the program in a radio broadcasting is carried out in the invention at text data, image data, and the digital program data of a video data and others as a result of an artificer's repeating research wholeheartedly, A data-conversion means by which said digital program data transmitted from this program data input means are changed into HTML data, When the HTML data changed with this data-conversion means considered as the network broadcast system equipped with the 2nd server by which storage preservation is carried out etc. in read-out **** from the client terminal Since the program information in the inputted radio broadcasting is changed from text data, image data, a video data, etc. by the HTML file and storage preservation is carried out at servers, such as the 2nd server The client terminal which accessed this 2nd server can always be provided with the contents of a program in a radio broadcasting. Especially in the Internet network, the contents of a program in a radio broadcasting can be known easily [in the browser of the accessed client terminal], and simple, and said technical problem is solved.
[0011]
[Embodiment of the Invention] Hereafter, one gestalt of suitable operation of the network broadcast system of this invention is explained based on a drawing. Drawing 1 is the schematic diagram showing the data flow of the network broadcast system of this invention. The program by the artist, announcer, etc. (it does not ask whether it is the so-called live program or it is a recorded program, but the program of the midst actually broadcast in the voice radio broadcasting is said.) It is below the same. It is recorded or voice broadcast of the program is carried out with radio from the studio S currently reproduced.
[0012] Furthermore, the speech information of this program is inputted into the program data input means 10 from said studio S. This program data input means 10 is the image (a static image, a dynamic image, computer graphics, etc. include any concept.) of text data input section 10a for the operator who heard the contents of the program to do the conversion input of the contents almost real time at alphabetic data, the artist who is present in said studio S, goods, etc. It is below the same. Although 10d of CG (Computer Graphic) data input sections for processing into computer graphical data the multimedia data of voice input section 10c of the microphone and others for ****(ing) talks, music, etc., such as an artist who is present in image data input section 10b for taking a photograph and said studio S, voice, and an image and others etc. is applicable, it is not limited to these. thus, the

contents of the program -- almost -- being real-time (real time) -- a conversion output is carried out at digital program data (text data, image data, digital data of a video data and others).

[0013] And said digital program data by which the conversion output was carried out with said program data input means 10 are HTML data (an HTML file is included.) at the control server V1. It is below the same. It is changed and is provided according to public access as the text which synchronized with advance of a program by the 2nd server V2 as the 2nd so-called server, image information, speech information, etc.

[0014] For example, in drawing 1 , when announcer etc. notifies of the prize which gives a listener the Moritaka bag by the lottery within a program, the contents of a prize are changed into the alphabetic data (digital program data) of the contents of "the Moritaka bag and a present" with said program data input means 10. This alphabetic data is changed into HTML data by said control server V1, and storage preservation is carried out in read-out **** from the client terminals C1 and C2 and -- at said 2nd server V2. Thereby, said accessible client terminals C1 and C2 and -- can access the network N of a dedicated line network and others in [LAN, WAN, and PSTN] the Internet network, an intranet network, and a company at said 2nd server V2 using communications protocols, such as TCP/IP.

[0015] Said 2nd server V2 exhibits the HTML data by which storage preservation was carried out to public access. The HTML data storage preservation in this 2nd server V2 is an HTML file (it considers as a concept also including the image file of GIF, and JPEG and others, and the voice file of a WAV file and others.) in order to be when and to make read-out possible. below the same. ****** -- although it may save, when extent which synchronizes with the contents of the program is strong, it may consider as the configuration which breathes out HTML data in the sink which is not illustrated In this case, the HTML data breathed out by the sink are good also as a configuration which is generated as a file for every fixed time amount.

[0016] Next, drawing 2 is the detailed block diagram of the network broadcast system of this invention. The program information which synchronized with the contents of the program is suitably inputted into said program data input means 10 by the operator. For example, when there is a notice of a prize present by the program, the operator who does not illustrate the contents of a notice of the prize present inputs into listening and coincidence by text data input section 10a, such as a keyboard.

[0017] The configuration that the so-called high-speed word processor etc. is applicable, for example, the special keyboard whose letter key is about ten pieces is used, an operator is stationed by the 3-4-person lot, and it inputs into a relay type is sufficient as this text data input section 10a. In that case, the inputted text data is accumulated in the recording device for proofreading which is not illustrated, may be displayed on the monitor of a corrector different from said operator, and may be taken as the proofreading decided as a final text string after proofreading a conversion mistake etc.

[0018] Moreover, said image data input section 10b is image pick-up equipments, such as a digital camera and a video camera, for example, when DJ, such as an artist, notifies of their new song CD in a program, it is applied to the application of photoing the CD jacket in said studio S.

[0019] Moreover, 10d of said CG data input sections may process the image data which are the image processing terminal unit applied in order to create the graphical data (graphic file) processed especially using the computer, and were photoed in said image data input section 10b. For example, a video data can be created from two or more image files, or it can apply to the application of creating crickable map data.

[0020] Thus, since digital program data, such as the text data and image data in which the contents which synchronized with the contents of the program are shown, voice data, and CG data, are changed into HTML data, it is transmitted to the data-conversion means 20 (refer to drawing 2). This data-conversion means 20 is suitably controlled by the network broadcast program which controls the network broadcast system of this invention. The network broadcast program is recorded on the program setting means 21 as a record medium of ROM, and a hard disk and others in computer read ****.

[0021] The program information data changed into HTML data with said data-conversion means 20 are read to said 2nd server V2 as a WEB server to access of the client terminals C1 and C2 and --, and storage preservation is carried out in ****.

[0022] The communications control means 50 is the CCE of TA, a router, a bridge, a dedicated line interface, and DSU and others, and is for connecting said 2nd server V2 to said network N.

[0023] Next, drawing 3 is the functional block diagram of the network broadcast system of this invention. Said digital program data, such as the text data and image data which were inputted synchronizing with advance of a program, and voice data, are received in input data receive section 20a of said data-conversion means 20. This input data receive section 20a can apply record media, such as RAM, buffer memory, and cache memory. HTML conversion can be carried out certainly, without disappearing the transmitted program information data, even when said program information data are transmitted one after another and processing of HTML transducer 20b stops fulfilling demand by this.

[0024] And said HTML transducer 20b generates serially the HTML data of the contents suitable for the attributes (for example, classification of text data, image data, a video data, voice data, and ** etc.) of the inputted digital program data, and carries out the conversion output of the digital program data at HTML data.

[0025] the specifically inputted digital program data -- "the Moritaka bag and a present" -- when it is the text data of the contents to say, the HTML data "<Moritaka bag and present>" using a HTML tag are generated. Moreover, URL (Unified Resource Locator) of the Internet homepage of a sponsor company is introduced in a program, and when the inputted digital program data are the text data

""http://www.abc.or.jp/""", HTML data, such as "<REF="http://www.abc.or.jp/" >",
are generated.

[0026] Thus, storage preservation of the HTML data by which the conversion output
was carried out is carried out serially at said 2nd server V2, and record-keeping of
the public, such as the accessible client terminals C1 and C2 and ――, is preferably
carried out to the record medium which the hard disk which is not illustrated, RAM,
etc. can read [write-in] in access **** in Network N.

[0027] Next, <u>drawing 4</u> is a flow chart which shows an example of the network
broadcast program execution processing in the network broadcast system of this
invention. Here, a program shall advance in a program to time series in prize guidance
(event 1:S100), CD sale preliminary announcement (event 2:S200), a guest artist and
conversation (event 3:S300), ――, order called Event n.

[0028] First, if an event 1 occurs in a program (S100), the operator who heard the
contents will do the text input of the contents of the prize of an event 1 in said text
data input section 10a (S101). Although this inputted text data may consider as the
configuration by which end reception is carried out in said input data receive section
20a, it may be taken as the configuration immediately transmitted to said HTML
transducer 20b. Thus, the conversion output of the text data (digital program data) of
the event 1 received in said HTML transducer 20b is carried out at the HTML data in
accordance with the syntax of a HTML sentence.

[0029] Hereafter, similarly, if an event 2 occurs in a program (S200), the operator who
heard the contents will do the image input of the image of CD jacket of an event 2 in
said image data input section 10b (S201). Although this inputted image data may
consider as the configuration by which end reception is carried out in said input data
receive section 20a, it may be taken as the configuration immediately transmitted to
said HTML transducer 20b. Thus, the conversion output of the image data (digital
program data) of the event 2 received in said HTML transducer 20b is carried out at
the HTML data in accordance with the syntax of a HTML sentence.

[0030] Moreover, if an event 3 occurs in a program (S300), the operator who heard
the contents will do the text input of the command to which starting of the chat
program of an event 3 is urged in said text data input section 10a (S301). Although
this inputted command may be considered as the configuration by which end
reception is carried out in said input data receive section 20a, it may be considered
as the configuration immediately transmitted to said HTML transducer 20b. Thus, a
conversion output is carried out at the HTML data in accordance with the syntax of a
HTML sentence, or the conversion output of the command (digital program data) of
the event 3 received in said HTML transducer 20b is carried out at a JAVA
(trademark) script.

[0031] Thus, if the n-th of various events (event) generated in a program one by one
occurs (S400), the operator who heard the contents will input the contents of the
event n with said data input means 10 (S401). Although this inputted digital program

data may be considered as the configuration by which end reception is carried out in said input data receive section 20a, it may be considered as the configuration immediately transmitted to said HTML transducer 20b. Thus, the conversion output of the digital program data of the event n received in said HTML transducer 20b is carried out at the HTML data in accordance with the syntax of a HTML sentence, and specific programming language, such as JAVA (trademark), (402).

[0032] Next, the 2nd operation gestalt of the network broadcast system of this invention is explained. Although the fundamental configuration is the same as that of the 1st operation gestalt, with this operation gestalt, the configuration setting means 30 is added in drawing 2 . This configuration setting means 30 adds the display-position identifier which carries out display assignment of the contents of said client terminals C1 and C2 and the HTML data of -- received in the predetermined location of Browser B to said HTML data corresponding to the attribute of said HTML data transmitted from said data-conversion means 20.

[0033] Personality display setting section 30a performs processing which displays the contents of the text corresponding to the received HTML data concerned, the image, etc. on the location considered to be suitable for said configuration setting means 30 usually displaying a personality in said browser B when the attribute of the received HTML data is related with the personality (DJ) of a program for example.

[0034] Specifically, the inputted program information data carry out the assignment input of being the contents about a personality by the alter operation from said text data input section 10a, such as an operator who does not illustrate, etc. Processing which adds the display-position identifier for displaying the contents of the text corresponding to the received HTML data concerned, the image, etc. on the location considered by this that the HTML data about the personality changed into HTML data are suitable for usually displaying a personality in said browser B in personality display setting section 30a to the HTML data concerned is performed. Although said display-position identifier can apply the HTML tag which specifies display positions, such as a left end, a right end, the upper part, a lower part, and centering, it is not limited to this.

[0035] When similarly the attribute of the received HTML data is related with the contents updated by usual states, such as the newest traffic information, in said browser B, update information display setting section 30b performs processing which displays the contents of the text corresponding to the received HTML data concerned, the image, etc. on the location considered to be suitable for usually displaying such update information.

[0036] Specifically, the inputted program information data carry out the assignment input of being the contents about update information by the alter operation from said text data input section 10a, such as an operator who does not illustrate, etc. Processing which adds the display-position identifier for displaying the contents of the text corresponding to the received HTML data concerned, the image, etc. on the location considered by this that the HTML data about the update information changed

into HTML data are suitable for usually displaying update information in said browser B in update information display setting section 30b to the HTML data concerned is performed.

[0037] When similarly the attribute of the received HTML data is related with contents, such as music ranking of a program, and a music name list, in said browser B, contents display setting section 30c performs processing which displays the contents of the text corresponding to the received HTML data concerned, the image, etc. on the location considered to be suitable for usually displaying such contents.

[0038] Specifically, the inputted program information data carry out the assignment input of being the contents about the contents of a program by the alter operation from said text data input section 10a, such as an operator who does not illustrate, etc. Processing which adds the display-position identifier for displaying the contents of the text corresponding to the received HTML data concerned, the image, etc. on the location considered by this that the HTML data about the contents changed into HTML data are suitable for usually displaying such contents in said browser B in contents display setting section 30c to the HTML data concerned is performed.

[0039] When similarly the attribute of the received HTML data is related with the sponsor of a program, in said browser B, 30d of sponsor display setting sections performs processing which displays the contents of the text corresponding to the received HTML data concerned, the image, etc. on the location usually considered to be suitable for displaying a sponsor.

[0040] Specifically, the inputted program information data carry out the assignment input of being the contents about a sponsor by the alter operation from said text data input section 10a, such as an operator who does not illustrate, etc. Processing which adds the display-position identifier for displaying the contents of the text corresponding to the received HTML data concerned, the image, etc. on the location considered by this that the HTML data about the sponsor changed into HTML data are suitable for usually displaying a sponsor in said browser B in 30d of sponsor display setting sections to the HTML data concerned is performed.

[0041] Here, in order for a sponsor's display to be performed by said sponsor display setting section proper, only time amount based on a contract may be considered as a configuration equipped with a setting time-of-day monitor means 40 to confirm whether the HTML data which surely display the sponsor of the program are generated. Although it is desirable to consider as the configuration which sends out the instruction signal with which only the time amount only a contract of was made surely continues displaying a sponsor's name, goods, etc. on the time of day a contract of was made in C, the JAVA script (trademark), the ActiveX control (trademark), etc. as for this setting time-of-day monitor means 40, it is not limited to this.

[0042] It is made above. With said configuration setting means 30 Said HTML data with which said display-position identifier was added corresponding to the attribute of

said HTML data transmitted from said data-conversion means 20 For example, it may consider as the configuration by which storage preservation is carried out like <u>drawing 3</u> at said 2nd server V2 as the file F1 for a personality display, the file F2 for a contents display, the file F3 for an update information display, and a file F4 for a sponsor display (refer to <u>drawing 3</u>).

[0043] Next, the 3rd operation gestalt of this invention is explained. Although the configuration of this operation gestalt is the same as that of the 1st operation gestalt or the 2nd operation gestalt fundamentally Said various digital program data relevant to the program of CD jacket, an artist's portrait, the image of a prize prize, and others The digital program data-logging section D1 by which storage preservation is beforehand carried out as a text file, an image file, and a program file of a voice file and others in read-out ****, It considers as the configuration which adds the Rink setting means 22 which carries out selection read-out of the desired digital program file from this digital program data-logging section D1, and carries out linking of the correspondence part of said HTML data to this digital program file by which selection read-out was carried out (refer to <u>drawing 2</u>).

[0044] Storage preservation of said various digital program data relevant to the program of CD jacket with which sending out beforehand said digital program data-logging section D1 to said network N, for example is planned, an artist's portrait, the image of a prize prize, and others is beforehand carried out as a text file, an image file, and a program file of a voice file and others in read-out ****. Into this, storage preservation of the image file photoed in the program may be carried out (refer to <u>drawing 3</u>).

[0045] And said Rink setting means 22 carries out selection read-out of the desired digital program file suitably by selection actuation or automatic selection of an operator from said digital program data-logging section D1. Furthermore, linking of the correspondence part in said HTML data is carried out to this digital program file by which selection read-out was carried out. Thereby, images, such as CD jacket corresponding to the contents of the received HTML data, an artist's portrait, and a prize prize, related information, etc. can be certainly displayed on each browsers B and B in a viewer's client terminals C1 and C2 and --, and --.

[0046] Next, the 4th operation gestalt of this invention is explained. Although the configuration of this operation gestalt is the same as that of the 1st operation gestalt, the 2nd operation gestalt, or the 3rd operation gestalt fundamentally A program The company name image of the sponsor who provides, a trademark LOGO image, The sponsor data-logging section D2 by which storage preservation of the various sponsor data of URL and others of the Internet homepage is beforehand carried out in a text file, an image file, a voice file, hyper-text data, etc. by read-out ****, The setting time-of-day control means 60 which reads said sponsor data corresponding to the offer sponsor of the program under broadcast from said sponsor data-logging section D2, and is transmitted to said data-conversion means 20 is added (refer to <u>drawing</u>

<u>3</u>).

[0047] Said sponsor data-logging section D2 is carrying out storage preservation of the data (sponsor data), such as URL of the company name image of each sponsor who sponsors a program, a trademark LOGO image, and the Internet homepage, in various data format, such as a text file, an image file, a voice file, and hyper-text data. These data are used for exposure for an advertisement.

[0048] Said setting time-of-day control means 60 reads said sponsor data corresponding to the offer sponsor of the program under broadcast (program) from said sponsor data-logging section D2, and carries out transfer control at said data-conversion means 20. At this time, if it is the advertising exposure time of day set up beforehand, it may consider as the configuration which surely transmits that corresponding sponsor's sponsor data. On the contrary, when the advertising exposure time of day set up beforehand passes, it may consider as the configuration which sends out the command of the purport which surely stops the advertising exposure in said browser B of the corresponding sponsor's sponsor data.

[0049]

[Example] The network broadcast system of this invention constituted as mentioned above may be realized, for example in the following examples. <u>Drawing 5</u> shows each client terminals C1 and C2 and the example of a display of the homepage which may be displayed on --, as a result of carrying out the network broadcast system of this invention.

[0050] For example, when current time of day is around 2:05, the clock image T made into the gestalt of a clock by CGI is displayed in the center of Browser B. The function of CGI constitutes this so that an updating indication of the current time may be given at proper spacing for every [every minute,] 5 minutes.

[0051] The display "OO Keiko's Western music count-down" which is the title of a current program is outputted to the information at 5th viewing-area A5. The configuration on which an operator displays the text inputted from said text input section 10a is sufficient as this, and from said digital program data-logging section D1, it is good also as a configuration suitably displayed by control of said setting time-of-day control means 60, and is not limited to these.

[0052] Moreover, when an operator takes the photograph of the personality "OO Keiko" of a program, a conversion output is carried out with said HTML conversion means 20 from said image data input section 10b at proper HTML data so that the image data may be displayed on the 1st viewing area A1 of Browser B.

[0053] Moreover, when new traffic information has been recognized by the operator, the input from said text data input section 10a by the operator is immediately reflected in the 2nd viewing area A2.

[0054] Moreover, when music is applied one after another and corrects a music list in a program, an operator inputs the text data which starts a new music list from said text data input section 10a. Thereby, the correction is immediately reflected in 3rd

viewing-area A3.

[0055] Moreover, advertising exposure of the sponsor who sponsors a program "OO Keiko's Western music count-down" may be performed to 4th viewing-area A4. Advertising exposure of this sponsor is displayed on 4th viewing-area A4 by the display-position identifier added to the HTML data which correspond in 30d of said sponsor display setting sections. This advertising exposure may carry out only a company name, this company name may be indicated by the hypertext, a sponsor's trademark LOGO may be displayed, and, in any cases, it is not limited.

[0056] Moreover, it is Odaiba although it is a rainy day contents "today of the talk which the operator who heard DJ's talk inputted. -- " may be displayed on the 6th viewing area A6. Thereby, you can make it reflected in the 6th viewing area A6 almost real time to the contents of DJ's talk.

[0057] Thus, the various information displayed is each viewing area A1 as mentioned above. -- It shall not be limited to A5 and shall set up suitably. The setting storage of the setup may be carried out at said program setting means 21.

[0058] Drawing 6 shows the effectiveness at the time of clicking further the sponsor display (being a display of an icon, and a hypertext and others for example, "ABC company") currently displayed on said 4th viewing-area A4 [refer to drawing 6 (A)]. That is, as jumped to "another page" which displays the product preview of the sponsor ABC company concerned etc. corresponding to reception of the click signal, said Rink setting means 22 is the configuration of having stretched Rink [refer to drawing 6 (B)].

[0059] The "another page" is the file F4 for a sponsor display stored in the 2nd server V2 of selves, such as a broadcasting station which offers not the server of said sponsor ABC company but the network broadcast system of this invention, in a visitor's access ****. Before moving to the homepage of said sponsor ABC company, it is the page of the advertisement for exposing goods notifying etc. intensively, and, specifically, an advertisement is exposed on a visitor's browser B with a text, an image (a still picture and an animation are included), voice, etc. On these specifications, this "another page" may be called "an intensive advertising page, such as goods,." Since goods to notify etc. can be intensively exposed to a visitor's browser B before a visitor moves to the homepage of said sponsor ABC company by preparing an intensive advertising page, such as these goods, an effect of advertising increases further.

[0060] The advertising exposure time can change an intensive advertising page, such as said goods, suitably by the contract with sponsor companies, such as said ABC company. When the advertising exposure time a contract of was made is 10 seconds, specifically said setting time-of-day monitor means 40 In the HTML functor in an intensive advertising page, such as the goods concerned HTML functor including the instruction automatically jumped to the homepage of sponsor companies, such as said ABC company, is inserted after [of the time of access initiation (at the time of the

click input signal reception to said sponsor display currently displayed on 4th viewing-area A4 on Browser B)] 10 seconds. Supervisory control is carried out so that only the standby time from the time of the access initiation to a sponsor display to the next jump may be displayed on a visitor's browser B. That is, the standby time from the time of access initiation to the next jump turns into the substantial advertising exposure time. This exposure time can be suitably changed in the figure of a second unit. Thereby, only the time amount according to the contents of a contract can expose an advertisement certainly, and can guide a viewer to the homepage of the ABC company concerned gradually, and an effect of advertising improves it dramatically.

[0061] Moreover, from an intensive advertising page, such as said goods, it may consider as a configuration including the hypertext display of corresponding URL at the Internet homepage which the ABC company itself which is a sponsor company owns so that a direct jump can be carried out according to a visitor's click etc. Thereby, a viewer can be gradually guided to the homepage of the ABC company concerned, and an effect of advertising improves dramatically.

[0062] Next, drawing 7 shows the effectiveness at the time of clicking said clock image T in said browser B. Supposing current time is around 6:27, said Rink setting means 22 will consider as the configuration which has stretched Rink so that it may jump to another page which displays a corresponding type table.

[0063] Here, the usual timetable displays only a program name. And when the program name is long, it may display by making it the shortened name. In the network broadcast system of this invention, the trademark of the prime product of the sponsor name or this sponsor who sponsors the program (the child program classified by sponsor in a program is also included) concerned etc. is considered as the configuration which indicates by contiguity in the timetable at a program name.

[0064] Here, said Rink setting means 22 sets up beforehand, or an operator notices in a program and inputs the command of the Rink setup etc. into the trademark of the prime product of the offer sponsor name or this sponsor from said text data input section etc. so that it may jump to various URL. Corresponding to these, said HTML transducer 20b carries out the conversion output of the HTML data with which Rink was stretched appropriately. In this example, if a company name is clicked, and a trademark LOGO is clicked to the its company homepage of the firm, Rink of the contents jumped to introduction homepages, such as the prime product of the firm, will be set to it.

[0065] In this specification, an offer sponsor's advertisement (CM, a story-like ad, Spot CM) broadcast in a program shall also be included in a "program." Moreover, it may be formed with a record medium with same said digital program data-logging section D1 and said sponsor data-logging section D2, this may be named generically, and it may be called the program data-logging means D. Moreover, said file F1 for a personality display, the file F2 for a contents display, the file F3 for an update

information display, and the file F4 for a sponsor display may be named generically, and "the file for a display" may be called. Moreover, said control server V1 and said 2nd server V2 may be used as the one same server computer.

[0066] The network broadcast system of this invention explained above may be realized by network broadcast program execution control. This network broadcast program is recorded on the record medium 21 in which read is possible, for example, the account program setting means of beforehand, by computer P of a personal computer, a server computer, a general purpose computer, and others. As it is indicated in <u>drawing 8</u> as the record medium, RAM (Random Access Memory), ROM (Read Only Memory), DRAM (Dynamic RAM), The memory chips M1 and EPROM (Erasable Programmable Read Only Memory), such as SDRAM (Synchronous DRAM) and SRAM (Static RAM), EEPROM (Electrically Erasable Programmable Read Only Memory), A smart card (trademark), SmartMedia (trademark), The magnetic disks M4, such as the mass recording apparatus M3 and FD (Flexible/Floppy Disk), such as the card mold memory M2, such as a flash memory, and a hard disk, DVD-RAM (Digital Video Disk-RAM), a magneto-optic disk (MO), It is the disk mold record-medium M5 grade of CD-ROM and others, in addition can apply also with the record medium in which what kind of computer read is possible.

[0067]

[Effect of the Invention] A program data input means 10 by which the conversion output of the program information about the program in a radio broadcasting is carried out in invention of claim 1 at text data, image data, and the digital program data of a video data and others, A data-conversion means 20 by which said digital program data transmitted from this program data input means 10 are changed into HTML data, When the HTML data changed with this data-conversion means 20 considered as the network broadcast system equipped with the 2nd server V2 by which storage preservation is carried out in read-out **** from the client terminals C1 and C2 and -- Without forcing a burden upon a listener in any way, he can distribute the program currently broadcast by the conventional radio broadcasting to a listener almost real time and effectively, and the contents of a program can be made to understand more deeply. Moreover, the contents of a program can also be made to also permeate certainly those who are not hearing the contents of the radio broadcasting program, and said technical problem is solved.

[0068] Specifically it combines with advance of a program, the information (all contents about DJ's talk, a keyword, a notice, prize guidance, advertising advertisement, and a catch copy and other programs) about the contents of a program is inputted from the program data input means 10, and it is changed into various digital program data, such as text data and image data. Thereby, speech information and vision information are convertible for the data attribute suitable for computer processing.

[0069] And serially, predetermined syntax analysis is performed by the data-

conversion means 20, and said digital program data are changed into the HTML data containing a HTML tag etc. Thereby, it is easily convertible for the data format which can be perused by the browser B as a browser currently generally used especially in the Internet or intranet.

[0070] Furthermore, storage preservation of this changed HTML data is carried out at the 2nd server V2 as a WEB server. By this this 2nd server V2 by connecting with Network N by a dedicated line etc. Since perusal of the contents of the program currently sponsored with voice by the radio broadcasting to the public (a listener and a viewer are included) same and accessible to said network N can be enabled on a browser The program currently broadcast by the conventional radio broadcasting is distributed to a listener almost real time and effectively, and the epoch-making effectiveness of the ability to make the contents of a program understanding more deeply is done so.

[0071] Moreover, there is an extremely excellent advantage of the ability to make the contents of a program also permeate certainly those who are not hearing the contents of the radio broadcasting program by exhibiting the contents of the program by visual data in Network N.

[0072] Moreover, by sponsoring a program visually by this invention in Network N, the opinion from the public, a comment, a reaction, applications, etc. can be collected widely, and there is also an outstanding advantage that program offer of a radio broadcasting can be made by the completely new broadcast voice of the so-called interactive broadcast.

[0073] Moreover, to the listener who is actually hearing the program of a radio broadcasting, by having broadcast by the network broadcast system of this invention perused, the goods information and the artist who were not able to finish telling only by voice broadcast, DJ raw expression, etc. can be transmitted visually, and there is also an outstanding advantage of the ability to make the contents of a program understand more concretely.

[0074] Moreover, since the contents of the program can be visually transmitted to the public according to the network broadcast system of this invention Conventionally also to people with the paracusis which was not able to enjoy voice broadcast There is an extremely excellent advantage that the object of broadcast is expandable even to people who can transmit contents almost equivalent to voice broadcast almost real time, and can offer how to enjoy new broadcast, and could not grow into a listener conventionally.

[0075] Next, in invention of claim 2, it corresponds to the attribute of said HTML data transmitted from said data-conversion means 10 in claim 1 publication. It has said client terminals C1 and C2 and a configuration setting means 30 by which the display-position identifier of -- which carries out display assignment in the predetermined location of Browser B is added to said HTML data. This configuration setting means 30 generates the files F1, F2, F3, and F4 for a display according to the attribute of

said HTML data. By having considered as the network broadcast system which carries out storage preservation at said 2nd server V2 by using these files F1, F2, F3, and F4 for a display as new HTML data As a result of being able to display the various contents of a program on the location suitable for the contents of broadcast on the browser B which a viewer peruses in addition to extremely excellent the effectiveness and the advantage by invention of claim 1, there is an extremely excellent advantage that the contents of a program can be offered more intelligibly for a viewer.

[0076] Corresponding to the attribute of HTML data, a configuration setting means 30 by which the display-position identifier which carries out display assignment is added to said HTML data is specifically formed in the predetermined location of Browser B. By having considered as the configuration which generates the files F1, F2, F3, and F4 for a display according to the attribute of said HTML data For example, the information concerning [the information about a personality] the upper left section of Browser B and a sponsor company can add the display-position identifier of the contents of directions displayed on predetermined locations, such as the lower right section, to said HTML data. Consequently, since the home page of a user interface legible for a viewer can be offered, the contents of a program can be offered more intelligibly for a viewer.

[0077] Next, in invention of claim 3, it sets to claim 1 or two publications. Said various digital program data relevant to the program of CD jacket, an artist's portrait, the image of a prize prize, and others in read-out **** beforehand as a text file, an image file, and a program file of a voice file and others The digital program data-logging section D1 by which storage preservation is carried out, By having considered as the network broadcast system equipped with the Rink setting means 22 which carries out selection read-out of the desired digital program file from this digital program data-logging section D1, and carries out linking of the correspondence part of said HTML data to this digital program file by which selection read-out was carried out The graphical data which should be exposed beforehand in addition to extremely excellent the effectiveness and the advantage by claim 1 or invention of 2 (for example, CD jacket, a star's picture, etc.), Since a program can also send out quickly the hyper-text data which displayed URL according to advance, there is an extremely excellent advantage that the public can be widely provided with more visual information synchronizing with advance of a program.

[0078] Making it display on the browsers B, such as an image of CD jacket, a star's picture, concert information, and a coupon, can store beforehand the data whose intention it has by specifically forming the digital program data-logging section D1 by which storage preservation of said various digital program data is beforehand carried out as a program file in read-out ****. In and the phase perused by Browser B by having established the Rink setting means 22 which carries out selection read-out of the desired digital program file from this digital program data-logging section D1, and carries out linking of the correspondence part of said HTML data to this digital

program file by which selection read-out was carried out for example, URL which acted as Rink is displayed on homepages, such as a restaurant introduced by the program, a shop, and a company, by the hypertext, or An image file can be made into a crickable map, and it can say that it is as that fine information is offered according to a demand ****, therefore there is an extremely excellent advantage that the public can be widely provided with more visual information synchronizing with advance of a program.

[0079] Next, in invention of claim 4, it sets to claims 1 and 2 or three publications. A program The company name image of the sponsor who provides, a trademark LOGO image, The sponsor data-logging section D2 by which storage preservation of the various sponsor data of URL and others of the Internet homepage is beforehand carried out in a text file, an image file, a voice file, hyper-text data, etc. by read-out ****, By having considered as the network broadcast system equipped with the setting time-of-day control means 60 which reads said sponsor data corresponding to the offer sponsor of the program under broadcast from said sponsor data-logging section D2, and is transmitted to said data-conversion means 20 It adds to extremely excellent the effectiveness and the advantage by claims 1 and 2 or invention of 3. Since the effect of advertising at the time of being able to perform visually widely exposure of the advertisement which is the important business of a broadcasting station to the public even if it was a radio station only treating voice broadcast, and using the conventional radio station can be raised remarkably It has the epoch-making advantage that the value as advertising media of a radio station can be raised notably.

[0080] Specifically, various sponsor data can store beforehand the exposure data (a trademark LOGO, the hyper-text data of URL of a their company homepage, goods photograph, etc.) about a sponsor by having formed beforehand the sponsor data-logging section D2 by which storage preservation is carried out in a text file, an image file, a voice file, hyper-text data, etc. by read-out ****. And by having established the setting time-of-day control means 60 which reads said sponsor data corresponding to the offer sponsor of the program under broadcast from said sponsor data-logging section D2, and is transmitted to said data-conversion means 20 Although the offer sponsor will naturally also change if a time zone changes and a program changes From initiation of a program to termination, without depending on a help even in such a case, certainly The advertising media of a corresponding sponsor company can be exposed to Browser B, and since the effect of advertising at the time of using the conventional radio station can be raised remarkably, it has the epoch-making advantage that the value as advertising media of a radio station can be raised notably.

[0081] In invention of claim 5, it sets to claim 3 or four publications. Next, said 2nd server V2 Before jumping to the homepage of a sponsor company, the standby time from the time of the click input signal reception to the sponsor display currently displayed on 4th viewing-area A4 on a browser to the next jump is made into the

substantial advertising exposure time. The file F4 for a sponsor display which exposes goods to notify only of the time amount etc. intensively is boiled and stored in a visitor's access ****. said file F4 for a sponsor display By having considered as the network broadcast system by which the advertising exposure time is controlled by the setting time-of-day monitor means 40 which carries out supervisory control so that only the standby time from the time of the access initiation to a sponsor display to the next jump may be displayed on a visitor's browser B In addition to the outstanding effectiveness and the outstanding advantage by claim 3 or invention of 4, by having formed the file F4 for a sponsor display as an intensive advertising page, such as goods Since goods to notify etc. can be intensively exposed to a visitor's browser B before a visitor moves to the homepage of a sponsor company (jump), there is an extremely excellent advantage that an effect of advertising increases further.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]
[Drawing 1] The schematic diagram showing the data flow of the network broadcast system of this invention
[Drawing 2] The detailed block diagram of the network broadcast system of this invention
[Drawing 3] The functional block diagram of the network broadcast system of this invention
[Drawing 4] The flow chart which shows an example of the network broadcast program execution processing in the network broadcast system of this invention
[Drawing 5] The schematic diagram showing the example of a display of the homepage which may be displayed on each client terminal
[Drawing 6] For (A), the appearance schematic drawing (B) of the homepage which the network broadcast system of this invention offers is a schematic diagram showing one mode when clicking a sponsor name by the browser and jumping to the following page.
[Drawing 7] For (A), the appearance schematic drawing (B) of the homepage which the network broadcast system of this invention offers is a schematic diagram showing one mode when clicking a clock image by the browser and jumping to the following page, and an example of a related link.
[Drawing 8] The schematic diagram showing an example of the record medium with which the network broadcast program of this invention was recorded in computer read ****
[Description of Notations]

10 -- Program data input means
20 -- Data-conversion means
22 -- Link setting means
30 -- Configuration setting means
60 -- Setting time-of-day control means
C1, C2, -- client terminal
D1 -- Digital program data-logging section
D2 -- Sponsor data-logging section
F1, F2, F3, F4 -- File for a display
V2 -- The 2nd server